CSC 193  
STEM Incubator - Sensor and Human Computer Interaction, Spring 2014

Section A: W 4:00 - 5:00pm  Man 244

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Instructor
Dr. V. Paúl Pauca  
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course web: http://www.cs.wfu.edu/~pauca/CSC_193.html

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Course
Textbook:

No textbook is required for this course, but reading material may be assigned by the instructor as the course progresses.

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Grading:

Participation ...................... 40%
Attendance ........................ 20%
Presentations ..................... 20%
Team work ......................... 20%

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Course objective:

*Computer science is no more about computers than Astronomy is about telescopes.*

The purpose of this course is to introduce students to the field of computer science through hands-on work on real-world applications. By pairing incoming students with more advanced students who are already in the major, we hope to create a fruitful *apprenticeship* relationship between students, while maintaining a *mentorship* relationship with the course instructor.

Learning objective: develop problem-solving skills that use analysis, logical thinking, and abstraction to take on complex problems.

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Attendance: This one-hour course requires students to meet at least weekly with their instructor during the time scheduled for the course (4-5pm Wednesday, Manchester Hall 244).

Students are required to work in the STEM Lab for two additional hours during each week. A sign-up sheet will be filled on the first day of class. All work is expected to be team work and carried out in the STEM Lab. Each team will have three participants: 2 incoming students and 1 advanced CS student.

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Participation: Students are expected to be fully engaged in a project to be conducted by their teams. The projects will be centered around two challenges involving sensors and human computer interaction. Students in each team will work together
defining tasks to be completed in order to tackle these challenges. During the two additional hours to be spent in the STEM Lab, students will work together to complete these tasks. **Collaboration and interaction with other CSC 193 students is highly encouraged.**

Additionally, each student will be required to present his/her team’s work several times during the semester to students and instructors in the other CSC 193 STEM Incubator courses. Please note that these presentations are meant to help with continued progress, not as exams or evaluations of any sort.

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**Workflow:** Because the challenges to be given are realistic, we (students and instructor) will work iteratively, in two-week increments, breaking the problem into tasks, analyzing progress, and removing roadblocks.

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**Final Presentation:** During the last week of classes, each team will present a demo of the project it took on. These presentations will be a celebration for a job well-done, marking an important milestone in our STEM Incubator program.

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**Academic Integrity:** As always, students and mentors are to be careful in terms of ownership of material to be developed and used as part of the course. Any material used from the internet or from existing sources needs to be carefully specified as such. Any novel material also should be claimed by the author and copyrighted. Material shared through collaboration should also be properly credited.

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**Course Plan in the Event of Closure of the University:** In the event that the University closes due to pandemic or other disaster, the course will be continued through the internet or by postal mail, if the former is not available. Professor Pauca will distribute notes and other material through the course website (http://cs.wfu.edu/~pauca/CSC_193.html) or by postal mail in the case of internet service failure. Office hours will be held through the internet using either Skype (wspaquaquitas) or iChat (paulpauca). Students will be required to turn in required material electronically using Sakai or by postal mail. In addition Professor Pauca will be accessible by email through any of the following addresses: paucavp@wfu.edu and paulpauca@gmail.com.

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**Course Schedule:**
Check the course webpage: http://cs.wfu.edu/~pauca/CSC_193.html for a detail course schedule.